



PATENT
Docket No. 01018/9N

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Gaffney et al.

Serial No.: 10/087,702

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For: OFFSET LITHOGRAPHIC PRINTING
PRESS

Group Art Unit: 2854

Examiner: Funk, S.

Confirmation No.: 7986

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Commissioner for Patents
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Abraham P. Ronni, Reg. No. 41, 275

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DECLARATION UNDER 37 C.F.R. § 1.132

I, Harvey Robert Levenson, Ph.D., declare:

1. This declaration is submitted in response to the position of the Examiner, as detailed in the Final Office Action of September 10, 2003, that pending claims 1 to 8 of patent application Serial No. 10/087,702 are not supported by a written description in earlier filed application Serial No. 07/417,587 (the "ancestor application") due to the recitation of a printing plate adapted to be "wrapped around" the surface of the plate cylinder and the printing plate having "opposite ends."

2. A plate is a flat, rectangular sheet of metal that is wrapped around a plate cylinder and is clamped into position. In my opinion, for the reasons appearing below, the ancestor application clearly and reasonably conveys to the person of ordinary skill in the art that the applicants,

at the time of filing of the ancestor application, were in possession of a conventional printing plate, adapted to be wrapped around the surface of a plate cylinder, having opposite ends clamped in a clamping gap running axially along the surface of the plate cylinder. It is also my opinion that having opposite ends and being adapted to be wrapped around the surface of a plate cylinder are inherent properties of conventional printing plates.

I. Qualifications

3. I am presently a Professor at California Polytechnic State University (Cal Poly) in San Luis Obispo, Calif. and Department Head of its Graphic Communication Department. I have been involved in the printing industry for approximately 42 years during which I studied printing and held positions with professional organizations in advertising, commercial printing, research, and education. I have four degrees, three of which focus on printing technology and management, and one on communication. I hold a Ph.D. in Rhetoric and Communication from the University of Pittsburgh, a Master of Science degree in Printing from South Dakota State University, a Bachelor of Science degree in Printing from the Rochester Institute of Technology, and an Associates of Applied Science degree in Graphic Arts and Advertising Technology from New York City Community College (now known as New York City College of Technology). My educational and professional background is detailed further in my *curriculum vitae*, attached hereto as Exhibit A.

II. The meaning of "printing plate" in October 1989 at the time of filing of the ancestor application and inherent properties of a "printing plate"

4. A person of ordinary skill in the art pertaining to the patent application at issue typically would have had a Bachelor of Science degree in technical disciplines, such as mechanical or chemical engineering, industrial technology, printing or related disciplines, and related job experience of approximately 5 years.

5. By way of background, offset lithographic printing presses produce images from a planographic image carrier, known as a printing plate, which transfers an image to an offset lithographic blanket. The blanket then transfers the image to a substrate, typically paper.

6. In October, 1989, the time of filing of the ancestor application, offset lithographic conventional printing plates were in the form of flat, thin, rectangular sheets having opposite ends. In use, the plates were mounted to the surface of a plate cylinder of a printing unit of a printing press. To mount the flat plate on the surface of the plate cylinder, one must have necessarily wrapped the plate around the cylinder. Typically the opposite ends of the printing plate were clamped in a clamping gap running axially along the surface of the cylinder.

7. According to a 1989-dated printing manual, "[e]ach printing couple on a blanket-to-blanket web offset lithographic press consists of four basic elements[,]" including a dampening system, an inking system, a plate cylinder, on which a printing plate is mounted, and a blanket cylinder. (David B. Crouse & Robert J. Schneider, Jr., *Web Offset Press Operating*, 3rd ed. 1989, p. 15, attached hereto as Exhibit B.) The plate is specifically stated to be "a thin metal sheet that wraps around the cylinder surface and carries the image." (Exh. B at p. 15.) The plate has a leading

edge and a trailing edge, which are clamped in a lockup mechanism housed in a gap running across the cylinder. (Exh. B at pp. 16-17.) Regarding the printing cylinder, the printing manual states:

The basic features of all plate cylinders are the same. Almost all have **bearers**: smooth, flat metal rings at the extreme ends of the cylinder. Just inside each bearer (between the bearer and cylinder body) is a narrow groove, called the **gutter**. Between the two gutters is the **body**--the main portion of the cylinder on which the plate and packing are mounted.

(Exh. B at p. 15.) In summary, the printing manual states that one of the basic features of all plate cylinders is a body on which a plate is mounted. The plate mounting is stated to involve wrapping the plate around the plate cylinder and locking a leading and trailing edges of the plate in a gap running across the cylinder.

8. In view of the foregoing and based on my 42 years of experience in the printing industry, it is my opinion that the term "printing plate," as used in the ancestor application, had a recognized meaning in the lithographic printing art in October 1989, at the time of filing of the ancestor application: a thin, flat, rectangular sheet-shaped lithographic image carrier having opposite ends mountable in an axially extending gap in the plate cylinder. It is my further opinion that at the time of filing of the ancestor application a person of ordinary skill in the art would know that mounting a printing plate on a plate cylinder necessarily entails wrapping the plate around the cylinder and clamping the ends in a clamping gap running axially along the surface of the cylinder. It is further my opinion that having opposite ends and being adapted to be wrapped around the surface of a printing cylinder are inherent properties of a conventional printing plate.

III. The ancestor application clearly and reasonably conveys to one skilled in the art that at the time of filing of the ancestor application the applicants were in possession of a printing plate adapted to be wrapped around the surface of a plate cylinder and having opposite ends clamped in a clamping gap running axially along the surface of the plate cylinder

9. With the foregoing in mind, I turn to the disclosures of the ancestor application.

U.S. Patent Application No. 07/417,587, which discloses an offset printing press in which “[u]pper and lower plate cylinders 22 and 24 support printing plates.” See the ancestor application at page 6, lines 25-26. To a person of ordinary skill in the art, this disclosure of “printing plates” clearly and reasonably conveys that the applicants were at the time of filing of the ancestor application in possession of a printing plate, adapted to be wrapped around the surface of the plate cylinder and having opposite ends clamped in a clamping gap running axially along the surface of the plate cylinder, because that is and was at the time of filing of the ancestor application the art-recognized meaning of the term “printing plate.”

10. Figure 1 of the ‘587 application shows plate cylinders 22 and 24. The surface of the printing plate mounted on cylinder 22 is indicated by reference numeral 42. Figure 1 and the disclosure that “[u]pper and lower plate cylinders 22 and 24 support printing plates” clearly and reasonably conveys to a person of ordinary skill in the art that the printing plate in the applicants’ possession is mounted on the plate cylinder, which necessarily entails wrapping the plate around the cylinder. See the ancestor application at page 6, lines 25-26. Further, to a person of skill in the art, this disclosure of “printing plates” clearly and reasonably conveys that the applicants were at the time of filing of the application in possession of a printing plate having opposite ends clamped in a clamping gap running axially along the surface of the plate cylinder to which it is mounted, because that is and was at

the time of filing of the ancestor application the art-recognized method for supporting a printing plate on a plate cylinder.

11. U.S. Patent No. 3,166,013 ("Wyllie et al."), attached hereto as Exhibit D, discloses an expansible cylinder for a rotary printing press. A tubular printing plate is stated to be secured on a base cylinder by expansion thereof. (Exh. D, col. 1, lines 27-31.) To my knowledge, this product, or for that matter any printing plate having a configuration other than that of a flat, thin, rectangular sheet having opposite ends, was not commercialized or well known to those of ordinary skill in the art at the time of filing of the ancestor application.

12. Given the conventionality and widespread use of the flat, thin, rectangular sheet having opposite ends at the time of filing of the ancestor application, the reference to a "tubular printing plate" by Wyllie et al., or for that matter reference to other types of printing plates which I may not be aware of, in no way affects my opinion that the use of the language "[u]pper and lower plate cylinders 22 and 24 support printing plates," in the ancestor application, would indicate to a person skilled in the art that applicants, at the time of filing of the ancestor application, were in possession of a printing plate, adapted to be wrapped around the surface of a plate cylinder and having opposite ends clamped in a clamping gap running radially along the surface of the plate cylinder. This is because, as indicated above, the term "printing plate" had a recognized meaning in the lithographic printing art in October 1989, at the time of filing of the ancestor application: a thin, flat, rectangular sheet-shaped lithographic image carrier having opposite ends clamped in a clamping gap running axially along the surface of the plate cylinder to which it is mounted.

13. U.S. Patent No. 4,823,697 ("Randazzo"), attached as Exhibit E, relates to a magnetic plate cylinder. Randazzo discloses a printing plate cylinder have permanent magnets

disposed therein and having a cylindrical configuration. (Exh. E, Abstract.) Randazzo further discloses a rectangular printing plate having edges 53 and 55 wrapped around the printing cylinder. (Exh. E, col. 5, lines 54-56.) The plate is stated to be mounted and secured to the plate cylinder via a magnetic force. (Exh. E, Abstract.)

14. Use of the term "printing plate" in Randazzo is consistent with the applicants argument that one of ordinary skill in the art would have appreciated the recitation of a printing plate mounted on a plate cylinder in the ancestor application to convey a printing plate wrapped around a plate cylinder and having opposite ends, as recited in claim 1.

15. The ends of the plate in Randazzo are magnetically fixed to the plate cylinder as opposed to being clamped in a radially extending axial gap in the plate cylinder, as recited in claim 5. However, given the conventionality and widespread use of the flat, thin, rectangular sheet having opposite ends mountable in a radially extending gap in the plate cylinder at the time of filing of the ancestor application, I believe that use of the language "[u]pper and lower plate cylinders 22 and 24 support printing plates," in the ancestor application, would still indicate to a person skilled in the art that applicants, at the time of filing of the ancestor application, were in possession of a printing plate adapted to be wrapped around the surface of a plate cylinder and having opposite ends clamped in a clamping gap running radially along the surface of the plate cylinder. This is because (i) the magnetic printing plate of Randazzo was not, to my knowledge, commercialized or well known to those of ordinary skill in the art at the time of filing of the ancestor application, and (ii) the term "printing plate," as indicated above, had a recognized meaning in the lithographic printing art in October 1989, the time of filing of the ancestor application: a thin, flat, rectangular sheet-shaped lithographic image carrier having opposite ends mountable in a radially extending gap in a plate cylinder.

16. U.S. Patent No. 4,807,527 ("Knauer"), attached as Exhibit F, relates to a printing machine cylinder holder arrangement stated to be designed so as to facilitate re-sleeving of rubber blanket cylinder with a new cover. (Exh. F, col. 2, lines 30-33.) Knauer states that "Ser. No. 07/150,089, filed Jan. 29, 1988, KOBLE, describes an arrangement of re-sleeve a cylinder with a sleeve which may include. . . a printing plate." (Exh. F, col. 1, lines 19-22.) Knauer does not teach that the printing plate may be in the form of a sleeve. Rather, Knauer merely states that the a cylinder sleeve "may include" a printing plate. (Exh. F, col. 1, line 21.) The printing plate may be a conventional printing plate having opposite ends that is wrapped around the sleeve and inserted into an axially extending gap in the sleeve. Knauer does not indicate either way.

17. Notwithstanding the above, as indicated above with respect to Randazzo, I believe that use of the term "[u]pper and lower plate cylinders 22 and 24 support printing plates," in the ancestor application, would still indicate to a person skilled in the art that applicants, at the time of filing of the ancestor application, were in possession of a printing plate, adapted to be wrapped around the surface of a plate cylinder and having opposite ends clamped in a clamping gap running radially along the surface of the plate cylinder. This is because (i) the "sleeve. . . which may include a printing plate," discussed in Knauer was not, to my knowledge, commercialized or well known to those of ordinary skill in the art at the time of filing of the ancestor application, and (ii) the term "printing plate" had a recognized meaning in the lithographic printing art in October 1989, at the time of filing of the ancestor application: a thin, flat, rectangular sheet-shaped lithographic image carrier having opposite ends mountable in a radially extending gap in a plate cylinder.

18. U.S. Patent No. Re 34,970 to Tittgemeyer, attached hereto as Exhibit C, teaches an endless image carrier as an alternative to the conventional flat, thin, rectangular plate having

opposite ends. Tittgemeyer studiously avoids using the word "plate" to refer to its endless image carrier. Instead, Tittgemeyer uses the terms "print form" and "printing form" as a generic designation for image carrier, and "plate" for the flat, clamped plates of the prior art:

In offset printing processes, plates mounted on carrier cylinders fixedly installed in a printing unit are used. Clamping segments extended through the carrier cylinder are used to mount the plates. The plates begin and end within the extent of these clamping segments, accordingly the print carrier location corresponding to an end or a beginning of the printing form is recognizable.

(Exh. C, col. 1, lines 27-33 (emphasis added).) In one disclosed embodiment, the endless image carrier of Tittgemeyer is sleeve-shaped. Tittgemeyer refers to that embodiment as a "sleeve" or "sleeve-shaped printing [or print] form," but never as a "plate." In an alternative embodiment, the image carrier is a cylinder jacket, or shell. (Exh. C, Figure 6.) Tittgemeyer never refers to that embodiment as a "plate," either.

19. It is consistent with the conventional nature of a printing plate, i.e., flat, thin, rectangular sheet of metal that is wrapped around a plate cylinder and is clamped into position, that references to an alternately configured printing plate use an alternate name for the plate such as "print form," as in Tittgemeyer, or add an appropriate descriptor to the term, e.g., "tubular printing plate," as in Wyllie et al. or "magnetic," as in Randazzo, so as to distinguish it from the conventional "printing plate."

20. Aside from the use of the term "printing plate" in the ancestor application, the fact that the ancestor application discusses special methods for accessing only the blanket cylinder (and not the plate cylinder) for replacement of the tubular blanket, implies that the plate cylinder included the conventional printing plate, i.e., a printing plate wrapped around the plate cylinder and having opposite

ends clamped in an axially extending gap in the plate cylinder, which does not require special access methods for replacement. Specifically, the ancestor application discusses providing access to one end of the blanket cylinder via a movable portion of the frame (see the paragraph spanning pages 25 and 26) but lacks any mention as to how the plate cylinder might be accessed if it included a "tubular printing plate."

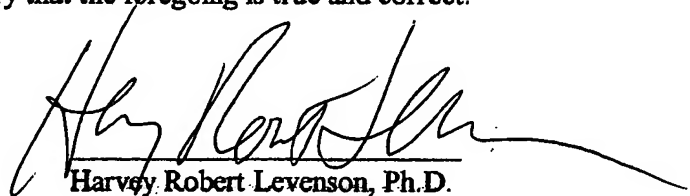
21. Accordingly, in my opinion, the ancestor application clearly and reasonably conveys to the skilled person that the applicants were in possession of a printing plate adapted to be wrapped around the surface of a plate cylinder and having opposite ends clamped in a clamping gap running axially along the surface of the plate cylinder.

VI. Conclusion

22. In summary, it is my opinion that the ancestor application, Patent Application Serial No. 07/417,587, clearly and reasonably conveys to the person of ordinary skill in the art that (1) the applicants were, at the time of filing of the ancestor application, in possession of a printing plate adapted to be wrapped around the surface of a plate cylinder and having opposite ends clamped in a clamping gap running axially along the surface of the plate cylinder, and (2) that having opposite ends and being adapted to be wrapped around a printing cylinder are inherent properties of a conventional printing plate.

I declare under penalty of perjury that the foregoing is true and correct.

Dated: 12/3/03


Harvey Robert Levenson, Ph.D.